



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A61K 38/00, 38/04, 39/00, 39/12, 39/38, 39/21, C07K 5/00, 7/00, 14/00, 16/00, 17/00	A1	(11) International Publication Number: WO 99/12556 (43) International Publication Date: 18 March 1999 (18.03.99)
--	----	--

(21) International Application Number: PCT/US98/18679
(22) International Filing Date: 8 September 1998 (08.09.98)

(30) Priority Data:
60/058,155 8 September 1997 (08.09.97) US

(63) Related by Continuation (CON) or Continuation-in-Part
(CIP) to Earlier Application 60/058,155 (CON)
US 8 September 1997 (08.09.97)
Filed on

(71) Applicant (for all designated States except US): THE PUBLIC
HEALTH RESEARCH INSTITUTE OF THE CITY OF
NEW YORK, INC. [US/US]; 455 First Avenue, New York,
NY 10016 (US).

(71)(72) Applicant and Inventor: PINTER, Abraham [--]; 1250
East 22nd Street, Brooklyn, NY 11210 (US).

(74) Agent: MEIKLEJOHN, Anita, L.; Fish & Richardson P.C., 225
Franklin Street, Boston, MA 02110-2804 (US).

(81) Designated States: AU, CA, JP, US, European patent (AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE).

Published

With international search report.

*Before the expiration of the time limit for amending the
claims and to be republished in the event of the receipt of
amendments.*

(54) Title: HIV-1 gp120 V1/V2 DOMAIN EPITOPES CAPABLE OF GENERATING NEUTRALIZING ANTIBODIES

(57) Abstract

The invention features a protein which includes a gp120 V1/V2 domain of an HIV-1 strain and not a gp120 V3 domain of an HIV-1 strain, which protein does not substantially bind CD4. The gp120 V1/V2 domain of the protein displays an epitope which is recognized by an antibody which neutralizes at least one HIV-1 primary isolate with a ND₅₀ of less than 100 µg/ml.